



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

DIVISION OF  
CORPORATION FINANCE

September 16, 2013

Via E-mail

Mr. Adanech Getachew  
General Counsel  
Response Genetics, Inc.  
1640 Marengo St., 6<sup>th</sup> Floor  
Los Angeles, California 90033

**Re: Response Genetics, Inc.  
Form 10-K  
Filed March 27, 2013  
File No. 001-33509**

Dear Mr. Getachew:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Item 1. Business.

Non-Exclusive License Agreement with GSK, page 8

1. Please disclose the remaining aggregate milestone payments that you may receive from GSK under the March 2010 agreement and file the agreement as an exhibit under Item 601(b)(10) of Regulation S-K. In the alternative, please provide your analysis why this agreement is not required to be filed as a material contract.

Intellectual Property, page 9

2. Please revise your disclosure to include the following information:
- the expiration date of the material patents licensed from USC and the type of patent protection (e.g., method, composition of matter);
  - the “select critical countries” in which patent applications are pending related to variations in your extraction technology, the dates filed and the type of patent protection;
  - the expiration date of the material patents licensed from Roche, the relevant jurisdictions and the type of patent protection;
  - with respect to your patents and patent applications related to tumor response markers, the respective expiration or filing dates, the “select critical countries” in which these patent rights are claimed, and the type of patent protection; and
  - whether your proprietary rights related to quantitative gene expression include patent coverage. If so, please provide the applicable expiration or filing dates, as the case may be, the relevant jurisdictions and the type of patent protection.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Mr. Adanech Getachew  
Response Genetics, Inc.  
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You may contact Matthew Jones at (202) 551-3786, Dan Greenspan at (202) 551-3623 or myself at (202) 551-3715 with any questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler  
Assistant Director